

United States Environmental Protection Agency
Region IX
POLLUTION REPORT

Date: Saturday, September 27, 2008

From: Tom Dunkelman

Subject: Fluids Management III Cleanup Continues

Yerington Anaconda Mine
102 Burch Dr., Yerington, NV
Latitude: 38.9988000
Longitude: -119.1911000

POLREP No.:	3	Site #:	09GURV08
Reporting Period:	9/22/08-9/27/08	D.O. #:	022-9036
Start Date:	9/8/2008	Response Authority:	CERCLA
Mob Date:	9/8/2008	Response Type:	Time-Critical
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	EP-W-07-022
RCRIS ID #:			

Site Description

The Yerington Mine Site is located approximately two miles west of Yerington, directly off of Highway 95, at 103 Burch Drive, Yerington, Lyon County, Nevada, and includes portions of Township 13N, Range 25E, Sections 4, 5, 8, 9, 16, 17, 20, and 21 (Mount Diablo Baseline and Meridian) on the Mason Valley and Yerington USGS 7.5 minute quadrangles. The geographic coordinates are 38E 59' 53.06" North latitude and 119E 11' 57.46" West longitude. The Site occupies 3,468.50 acres of disturbed land in a rural area, bordered to the north by open fields of alfalfa and residential acreage, and to the east by Highway 95, which separates the Site from the city of Yerington. Approximately fifty percent of the Site is privately owned land, and the rest is land within the jurisdiction, custody and control of the United State Bureau of Land Management ("BLM").

The Site began operation in or about 1918, originally known as the Empire Nevada Mine. In 1953, Anaconda Minerals Company ("Anaconda") acquired and began operating the Site. In or about 1977, Atlantic Richfield Company ("Atlantic Richfield") acquired Anaconda and assumed its operations at the Site. In June 1978, Atlantic Richfield terminated operations at the Site. In or about 1982, Atlantic Richfield sold its interests in the private lands within the Site to Don Tibbals, a local resident, who subsequently sold his interests with the exception of the Weed Heights community to Arimetco, Inc. ("Arimetco"), the current owner. Arimetco operated a copper recovery operation from existing ore heaps within the Site from 1989 to November 1999. Arimetco has terminated operations at the Site and is currently managed under the protection of the United States Bankruptcy Court in Tucson, Arizona.

EPA conducted an initial removal action at the Site, from February to May 2006. This work focused on removal of PCB containing transformers and fugitive dust suppression including construction of an 80-acre soil cap and application of a soil sealant to other areas of the site believed to be contributing dust.

From August to November 2006, EPA conducted a second removal action which addressed fluids management problems associated with the Arimetco Heap Leach System. This system includes ten ponds, all of which are in varying stages of disrepair. As part of this removal action, EPA conducted repairs and improvements to the Slot Pond #2, constructed an interceptor trench along the Megapond and constructed a four-acre Evaporation Pond.

In August and November 2007, EPA ERS conducted two additional removal assessments at the Site. One assessment focused on evaluating radiological contamination of the "Process Area" of the Site. The second removal assessment performed in August 2007 consisted of sub-surface sampling and analysis beneath the Arimetco heap leach ponds.

From October to November 2007, EPA conducted a removal action to address fluids management issues associated with the Bathtub Pond. This removal action included removal of sediments and liner from the pond, backfilling and grading the pond and construction of an interceptor trench along the shoulder of the

pond.

Current Activities

9/22/2008-9/27/2008. Personnel: EPA-4, ERRS-12, START 2

During this period ERRS continued to make excellent progress towards closure of heap leach ponds. Activities conducted included the following:

Old Raffinate Pond. ERRS excavated and hauled kerosene contaminated soil to the bioremediation pad constructed on top of the Slot Heap. Excavation of this pond was completed on 9/26, and backfilling of the pond was initiated on 9/27. START conducted confirmation sampling and analysis PetroFLAG field screening test kits. START also submitted samples to the R9 lab. The pond was excavated to a depth of approximately 20 below ground surface. Field screening indicated that TPH levels on the floor of the excavation were below 1,000 mg/kg. The OSC determined that that bulk of the contamination had been removed and made the decision that it was no longer practical to continue excavation.

Phase I/II Pond and associated Sediment Pond.

Excavation and backfilling of the Phase I/II Sediment pond was completed during this period. ERRS also completed final grading of the Phase I/II in preparation for lining of the pond. ERRS also conducted repairs to portions of the Phase I/II perimeter ditch.

MegaPond. ERRS resumed excavation of the MegaPond on 9/26. This work will continue through the next week.

Perimeter Ditches. ERRS initiated repairs to the Heap Leach perimeter ditches. Work was conducted on the Slot Heap ditches and the Phase I/II ditches.

Visitors to the site this period included Chris Reiner (EPA OSC), Steve Calanog (EPA OSC), Nadia Hollan-Burke (EPA RPM), Roy Thun (ARC), John Batchelder and representatives of the Yerington Paiute Tribe.

Planned Removal Actions

The goal of this removal action is to complete stabilization of the Arimetco Heap Leach Fluids Management System. The following activities will be performed:

Slot Pond #1. Contaminated sediments will be removed from this pond and placed on top of the adjacent Heap Leach Pad. The liner will be removed from the pond and placed in the onsite construction debris landfill

Plant Feed Pond. Contaminated sediments will be removed from this pond and placed on top of the adjacent Heap Leach Pad. The liner will be removed from the pond and placed in the onsite construction debris landfill. The area of the pond will be regraded,

New Raffinate Pond. Contaminated sediments will be removed from this pond and placed on top of the adjacent Heap Leach Pad. The liner will be removed from the pond and placed in the on-Site construction debris landfill. The area of the pond will be regraded,

Old Raffinate Pond. Contaminated sediments will be removed from this pond and placed on top of the adjacent Heap Leach Pad. The liner will be removed from the pond and placed in the onsite construction debris landfill. Kerosene-contaminated soils have been identified beneath this pond. The kerosene-contaminated soils will be excavated and either treated onsite or shipped offsite to an appropriate disposal facility.

Phase I/II Pond. Contaminated sediments will be removed from this pond and adjacent sediment pond and placed on top of the adjacent Heap Leach Pad. The liner will be removed from the Phase I/II pond and sediment pond and placed in the onsite construction debris landfill. The Phase I/II Pond and the adjacent sediment pond will be reconstructed, in order to continue to capture heap leach fluids. These fluids will be transferred to the Evaporation Pond via an existing pipeline.

MegaPond. Contaminated sediments will be removed from this pond and placed on top of the adjacent Heap Leach Pad. The liner will be removed from the pond and placed in the on-Site construction debris landfill. The area of the pond may be regraded, at the discretion of the OSC.

VLT pond. This pond still captures heap leach fluids from the VLT heap. The liner is sagging in numerous

areas, and small tears have been identified. This liner will be repaired.

Perimeter drains. Numerous tears have been identified in the perimeter drains which encircle the heap leach pads. To the extent practicable, the torn areas of the drains will be repaired and steps will be taken to limit future sun and wind damage to the perimeter drain liners, including covering damage portions of the perimeter drains with crushed gravel.

Ecological Mitigation. USFWS has identified several dead birds in the vicinity of the heap leach ponds. USFWS attributes the bird mortality to the low pH fluids in these ponds. Closure of the above-mentioned ponds should help to limit the threat to wildlife posed by the heap leach ponds. EPA will evaluate, and to the extent practicable, implement measures at the remaining heap leach and evaporation ponds aimed at deterring birds from accessing these ponds.

Next Steps

Continue excavation of MegaPond.

Construct anchor trench at Phase I/II pond in preparation for liner installation.

Begin hauling and mixing amendments for the bioremediation cell including alfalfa, manure and diammonium phosphate.

Key Issues

None

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